GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:1776
ANSWERED ON:02.08.2001
LOSS OF CEREALS DUE TO CLIMATIC CHANGE
HARIBHAU MAHALE;M.V.V.S MURTHI

Will the Minister of AGRICULTURE be pleased to state:

(a) whether India is the biggest loser from global warming losing millions of tonnes of its potential cereal harvest each year because of climate change as per the study global Agroecological Assessment for Agriculture in the 21st century as reported in `Pioneer` July 11, page 9;

(b) if so, the details in this regard;

(c) the Government`s reaction in this regard; and

(d) the corrective steps taken by the Government in this regard?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. DEBENDRA PRADHAN)

(a) No, Sir. There is considerable uncertainty in the magnitude of global warming and its effect on agricultural production by the year 2080.

(b) The study predicts an increase in mean temperature by 0.4 to 2Â°C duringkharif and 1.1. to 4.5Â° C by rabi 2070. Our own studies predict differential variation in temperature increase, rainfall and CO2 concentration over the north-west, central and southern India. Studies conducted by DST have predicted that by the middle of this century, the projected climate change scenario may bring an increase in rice yield in central and south India and a marginal decrease in NW India.There is indication of significant increase in yield of wheat in NW India and soybean in Central India.However, the effect of climate change on pest problems, weeds, diseases and toxicities of soils has not yet been studied.

(c) Global climate change is a reality, is a continuous process and needs to be taken seriously. However, global changes of such a time scale are discrete and uncertain events whereas policy-planning process has to be continuous. Indian agriculture is continuously undergoing transformation due to changing demands, markets and agricultural technologies. The response relating to adaptation of agriculture in 2050 and beyond would be more clear in the next two or three decades.

(d) Global negotiations under the auspices of the United Nationals have been underway to reduce by 2012 the emissions of greenhouse gases to 1990 level but success of these endeavors depends on active participation of the developed countries which are major contributors to global climate change.